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Science Abstracts Series B
January – June 2001

Subject Index (M – Z)

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Twice a year as part of their subscription to Electrical & Electronics Abstracts, subscribers receive cumulative indexes for the periods January-June and July-December. Each index is in two parts – a Subject Index, and an Author Index which comprises personal and corporate author indexes, and indexes to conferences and book titles. The List of Journals abstracted by INSPEC is also included with the July-December issue of the Author Index, while the supplement to that List is included with the January-June issue. Cumulative indexes for earlier years are also available: for details please see the inside back cover.

Subject index

The Subject index provides an alphabetical subject key to the articles included in the abstracts journal. Some general guidance on its use is given below:

1. Look in the index for the name of the specific subject in which you are interested. In most cases this name will be a heading in the index and you will find relevant articles under it. The majority of the subject headings fall into the following categories: property, phenomenon, substance or named objects, instrument, device, theory, method, process, application, event.

2. Occasionally you will be directed from the subject heading chosen to a different heading under which the relevant or additional articles are listed.

3. If you do not find the subject heading you first chose, try a more general heading.

4. Each entry under the heading relates to an article appearing in the abstracts journal and gives the serial number of that article in the journal, e.g. 12345 refers to abstract number 12345 for the period covered by the Index.

The language of the article, if it is not in English, is also indicated, e.g. amplification of information signals in chaotic masking (*Japanese*) 34992.

Each entry starts with a Keyword or Keyphrase considered to be most relevant to the heading. On sorting these Keywords, the qualifying prefixes are usually ignored (e.g. α-brass, 5-sulphosalicylic, 31 Gygni, n-Ge are sorted under brass, sulphosalicylic, Cygni, Ge respectively).

There are three main Keyword lists: alphabetical A-Z, elementary particles, and chemical symbols (organic substances are written and not given as chemical formula). More than one Keyword list may be present under each subject heading.

For document on, say, 'photoemission of germanium' at least two access points 'photoemission' and 'germanium' are provided. Under the heading 'photoemission' the Keyword will be 'Ge' and under 'germanium' the Keyword will be 'photoemission'.

In a case like this, it is advisable and quicker to use the heading 'photoemission' and go straight to the chemical symbol list for 'Ge'.

Intermetallic compounds are indexed under the appropriate alloy headings. The chemical formula is used as Keyword. However, it is important to realise in searching the chemical symbol list that, at present, allows and intermetallic compounds are sorted separately. For example FeCo is sorted at the end of the Fe-list e.g. Fe-Al,... Fe-Co,... Fe-Si,... Fe-Si-B,... FeCo,... FeSi and so on in this order.

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Abbreviations and Acronyms

Abbreviations and acronyms are used in the modifiers in all INSPEC Cumulative Subject Indexes. Individual terms should be readily understood in the context of the subject headings. **Inorganic substances** are usually given by their chemical formulae. **Organic substances** including **liquid crystals** and **polymers** are not given as formulae but common abbreviations are used.

1D	one-dimensional
2D	two-dimensional
2DEG	2D electron gas
3D	three-dimensional
4GL	fourth generation language
A/D	analogue-to-digital
AAL	ATM adaptation layer
AAS	atomic absorption spectrometry (-oscopy)
ABC	absorbing boundary condition *or* aerial bundled cables/conductors
ABR	available bit rate
ABS	acrylonitrile-butadiene-styrene
AC	alternating current
ACD	automatic call distribution
ACEL	AC electroluminescent
ACI	adjacent channel interference
ACQW	asymmetric coupled quantum well
ACRT	accelerated crucible rotation technique
ACSR	aluminium conductor steel reinforced
ACT	acoustic charge transport
ACTFEL	AC thin film electroluminescent
ACTS	advanced communication technology and services *or* Advanced Communication Technology Satellite
ACTV	advanced compatible television
ACV	air cushion vehicle
ADC	analogue-to-digital conversion(-ter)
ADM	adaptive delta modulation *or* add-drop multiplexer
ADP	administrative data processing
ADPCM	adaptive differential PCM
ADS	automatic depressurisation system
ADSL	asymmetric digital subscriber line
ADTV	advanced definition television
AE	acoustic emission
AEA	American Electronics Association
AES	Auger electron spectra (-oscopy)
AF	audio-frequency
AFBC	atmospheric fluidised bed combustion
AFC	automatic frequency control
AFL	abstract family of languages
AFM	atomic force microscopy
AFMR	antiferromagnetic resonance
AFR	away from reactor (spent fuel storage)
AGB	asymptotic giant branch
AGC	automatic gain control
AGN	active galactic nucleus (nuclei)
AGR	advanced gas-cooled reactor
AGS	alternating gradient synchrotron
AGV	automatic guided vehicle
AHDL	analogue HDL
AHP	analytic hierarchy process
AI	artificial intelligence
AIC	adaptive interference canceller
AIN	advanced intelligent networks
ALARA	as low as reasonably achievable
ALE	atomic layer epitaxy *or* adaptive line enhancer
ALGOL	Algorithmic Language
ALS	Advanced Light Source
ALU	arithmetic logic unit
ALV	autonomous land vehicle
ALWR	advanced light water reactor
AM	air mass number *or* amplitude modulation
AM/FM	automated mapping/facilities management
AMLCD	active matrix liquid crystal display
AMPS	Advanced Mobile Phone System
AMPTE	Active Magnetospheric Particle Tracer Explorers
AMR	automatic meter reading
AMS	accelerator mass spectroscopy
AMTEC	alkali metal thermoelectric convertor
ANA	automatic network analyser
ANN	artificial neural network
ANOVA	analysis of variance
ANS	Advanced Neutron Source
ANSI	American National Standards Institute
AO	acousto-optic(al)
AOI	automatic optical inspection
APACHE	Accelerator for Physics and Chemistry of Heavy Elements
APC	adaptive predictive coding
APCM	adaptive PCM
APCVD	atmospheric pressure CVD
APD	antiphase domain *or* avalanche photodiode
APFIM	atom probe field ion microscopy
API	application programming interface
APK	amplitude phase keying
APL	A Programming Language
APS	Advanced Photon Source *or* appearance potential spectra (-oscopy)
APW	augmented plane wave
APWR	advanced pressurised water reactor
ARC	antireflection coating
ARET	accelerated reliability enhancement testing
ARINC	Aeronautical Radio Inc.
ARMA	autoregressive moving average
ARMAX	ARMA exogenous
ARPA	Advanced Research Projects Agency
ARPES	angle resolved photoemission spectra (-oscopy)
ARQ	automatic repeat request
ARROW	antiresonant reflecting optical waveguide
ART	adaptive resonance theory
ARUPS	angular resolved UPS
ASCII	American Standard Code for Information Interchange
ASD	adjustable speed drives
ASE	amplified spontaneous emission
ASIC	application-specific integrated circuit
ASIP	application-specific integrated processor
ASK	amplitude shift keying

ASN	abstract syntax notation
ASPSK	antipodal Stokes parameters shift keying
ASQC	American Society of Quality Control
ASSP	application-specific standard product
AST	accelerated stress testing
AT&T	American Telephone & Telegraph
ATC	air traffic control
ATCS	Advanced Train Control System
ATE	automatic test equipment
ATF	Advanced Toroidal Facility
ATG	automatic test generation
ATLAS	Abbreviated Test Language for Avionic Systems
ATM	asynchronous transfer mode *or* automatic teller machine *or* Axilrod-Teller-Moto
ATMS	assumption-based truth maintenance system
ATPG	automatic test pattern generation
ATR	attenuated total reflection *or* automatic target recognition
ATS	automatic test system
ATV	advanced television
ATW	accelerator transmutation of (radioactive) waste
ATWS	anticipated transients without scram
AUV	autonomous underwater vehicle
AVC	automatic volume control
AVHRR	advanced very high-resolution radiometer
AWGN	additive white Gaussian noise
B-ISDN	broadband ISDN
BAER	brainstem auditory evoked response
BARITT	barrier injection transit time
BASIC	Beginners' All-purpose Symbolic Instruction Code
BAW	bulk acoustic wave
BBC	British Broadcasting Corporation
BBD	bucket-brigade device
BBGKY	Bogoliubov-Born-Green-Kirkwood-Yvon
BCB	benzocyclobutene
BCC	body-centred cubic
BCD	binary-coded decimal
BCDMOS	bipolar-CMOS-DMOS
BCH	Bose-Chadhuri-Hocquenghem
BCS	Bardeen-Cooper-Schrieffer
BCT	body centred tetragonal
BDD	binary decision diagram
BEBC	Big European Bubble Chamber
BEC	Bose-Einstein condensate (-ation)
BEDT-TTF	bis(ethylenedithio)-tetrathiafulvalene (-inium)
BEEM	ballistic electron emission microscopy
BEM	boundary element method
BEOL	back-end-of-line
BEPC	Beijing Electron Positron Collider
BER	bit error rate
BERT	bit error rate tester
BESOI	bond-and-etchback silicon on insulator
BFL	buffered FET logic
BFN	beam-forming network
BFO	beat-frequency oscillator
BGA	ball grid array
BGO	bismuth germanate
BH	buried heterostructure
BIBO	bounded input, bounded output
BiCMOS	bipolar CMOS
BiFET	bipolar FET
BIL	buried injection logic
BILBO	built-in logic block observation
BiMOS	bipolar metal-oxide-semiconductor
BIOS	basic input/output system
BIS	bremsstrahlung isochromat spectroscopy
BISDN	broadband ISDN
BISR	built-in self-repair
BIST	built-in self-test
BIT	built-in test
BITE	built-in test equipment
BJT	bipolar junction transistor
BLDCM	brushless DC motor
BNFL	British Nuclear Fuels plc
BOC	Bell Operating Company
BOD	bistable optical device
BOLD	blood oxygenation level dependence(-ent)
BOX	buried oxide
BP	backpropagation *or* British Petroleum
BPM	beam propagation method
BPR	business process reengineering
BPSG	borophosphosilicate glass
BPSK	binary phase shift keying
BPX	burning plasma experiment
BRDF	binomial reflectivity distribution function
BRET	breeder reprocessing engineering test
BSDL	Boundary Scan Description Language
BSG	borosilicate glass
BSI	British Standards Institution
BT	British Telecom
BTA	Basic Technology Accelerator
BTSC	Broadcast Television Systems Committee
BVP	boundary value problem
BWG	beam waveguide
BWIP	Basalt Waste Isolation Project
BWO	backward wave oscillator
BWR	boiling water reactor
BWT	backward wave tube
C-V	capacitance-voltage
C/N	carrier-to-noise
C^2	command and control
C^3	command, control and communications
C^3I	command, control, communications and intelligence
C^3L	complementary constant current logic
C^4	command, control, communications and computers
C^4I	command, control, communications, computers and intelligence
C4	controlled collapse chip connection
CAA	computer-aided analysis
CAA(A)	Clean Air Act (amendments)
CAAD	computer-aided architectural design
CAD	computer-aided design
CADAT	computer-aided design and testing
CADD	computer-aided drafting and design
CAE	computer-aided engineering
CAES	compressed air energy storage
CAGD	computer-aided geometric design
CAI	common air interface *or* computer-assisted instruction
CAIBE	chemically assisted ion beam etching
CAL	computer-aided learning
CALL	computer-assisted language learning
CALS	commerce at light speed *or* computer-aided acquisition and logistic(s) support

CAM	computer-aided manufacturing *or* content addressable memory
CAMAC	computer automated measurement and control
CAN	controller area network(ing)
CANDU	Canadian deuterium uranium
CAPP	computer-aided process (production) planning
CAQ	computer-aided quality assurance
CAR	computer-aided retrieval
CARL	chemical amplification of resist lines
CARM	cyclotron autoresonance maser
CARS	coherent anti-Stokes Raman scattering (spectra)
CART	classification and regression trees
CASE	computer-aided software engineering
CASS	consolidated automated support system
CAT	computer-assisted tomography *or* computerised axial tomography
CATR	compact antenna test range
CATT	controlled avalanche transit transistor
CATV	cable TV *or* community antenna TV
CAV	constant angular velocity
CB	citizens band
CBE	chemical beam epitaxy
CBED	convergent beam electron diffraction
CBI	computer-based instruction
CBL	computer-based learning
CBOOA	cyanobenzylidene octyloxyaniline
CBR	case-based reasoning *or* constant bit rate
CBT	computer-based training
CC	coupled channels *or* calculus of constructions
CCBA	coupled channel Born approximation
CCCS	current-controlled current source
CCD	charge-coupled device
CCFL	counter current flow limiting (LOCA phenomenon)
CCI	co-channel interference
CCII	second generation current conveyor
CCIR	International Radio Consultative Committee
CCITT	International Telephone & Telegraph Consultative Committee
CCL	capacitor coupled logic
CCN	cloud condensation nucleus/nuclei
CCS	common channel signalling *or* calculus of communicating systems
CCTF	Cylindrical Core Test Facility
CCTR	Culham Conceptual Tokamak Reactor
CCTV	closed circuit TV
CCVS	current-controlled voltage source
CD	compact disc *or* critical dimension
CD-I	compact disc - interactive
CD-ROM	compact disc ROM
CD-RW	compact disc - rewritable
CD-V	compact disc - video
CDD	concurrent decision diagram
CDFR	Commercial Demonstration Fast Reactor
CDI	collector diffusion isolation
CDLC	cellular data link control
CDM	code division multiplexing *or* charged device model *or* cold dark matter
CDMA	code division multiple access
CDP	common depth point
CDW	charge-density wave
CEBAF	Continuous Electron Beam Accelerator Facility
CECL	cascade-emitter coupled logic
CELP	code excited linear prediction
CEM	channel electron multiplier
CEMS	conversion electron Mössbauer spectra (-oscopy)
CEO	chief executive officer
CEPA	coupled electron pair approximation
CEPT	Conference of European Postal and Telecommunications
CERDIP	ceramic dual-in-line package
CERN	European Council for Nuclear Research
CESAR	CERN Electron Storage and Accumulation Ring
CESR	conduction electron spin resonance
CETI	contact with extraterrestrial intelligence
CFA	continued fraction approximation
CFAR	constant false alarm rate
CFBC	circulating fluidised bed combustion
CFC	chlorofluorocarbon
CFD	computational fluid dynamics
CFIE	combined field integral equation
CFSK	coherent frequency shift keying
CFT	conformal field theory
CGA	colour (*or* computer) graphics adapter
CGH	computer-generated holography (-gram)
CGI	Common Gateway Interface
CGTO	contracted Gaussian-type orbital
CHF	coupled Hartree-Fock
CHILL	CCITT High-Level Language
CHINT	charge injection transistor
CHO	Chinese hamster ovary
CHP	combined heat and power
CI	configuration interaction
CICC	cable-in-conduit conductor
CID	charge injection device
CIDEP	chemically induced dynamical electron polarisation
CIDNP	chemically induced dynamical nuclear polarisation
CIIL	Common Instrument Interface Language *or* Control Intermediate Interface Language
CIM	computer integrated manufacture (-ing) *or* constituent interchange model
CIO	chief information officer
CIRC	cross-interleaved Reed-Solomon code
CISC	complex instruction set computer
CIT	Compact Ignition Tokamak
CL	cathodoluminescence
CLAN	cordless LAN
CLC	cholesteric liquid crystal
CLCC	ceramic leaded chip carrier
CLEC	competitive local exchange carrier
CLOS	command-to-line-of-sight
CLP	constraint logic programming
CLV	constant linear velocity
CMA	constant modulus algorithm
CMAC	cerebellar model arithmetic computer *or* cerebellar model articulation controller
CMB	core-mantle boundary
CMD	colour-magnitude diagram(s)
CME	coronal mass ejection(s)
CMI	computer managed instruction

CMIP Common Management Information Protocol
CML current-mode logic
CMM coordinate measuring machine *or* Capability Maturity Model
CMOS complementary metal-oxide-semiconductor
CMP chemical mechanical polishing (planarisation)
CMR colossal magnetoresistance *or* common-mode rejection
CMRR common-mode rejection ratio
CMS cable management system
CMV common-mode voltage
CMVR common-mode voltage ratio
CNC computerised numerical control
CNDO complete neglect of differential overlap
CNF conjunctive normal form
CNN cellular neural net(work)
CNR carrier-to-noise ratio
CNS central nervous system
CO central office
COB chip-on-board
COBOL Common Business Oriented Language
COCOMO cost complexity model(ling)
COD crack opening displacement
COFDM coded orthogonal FDM
COG chip-on-glass
COIL chemical oxygen-iodine laser
COM computer output to microform (fiche or film) *or* coupling of modes *or* Component Object Model
COMFET conductivity-modulated FET
CORBA Common Object Request Broker Architecture
CORDIC coordinate rotation digital computer
COTS commercial off-the-shelf
COVA computer code validation
CP charge, parity
CP-MAS cross-polarisation MAS
CPA coherent potential approximation *or* critical path analysis
CPC compound parabolic concentrator
CPE customer premises equipment
CPFSK continuous phase FSK
CPLD complex programmable logic device
CPM continuous phase modulation *or* critical path method
CPN coloured Petri net *or* customer premises network
CPS coplanar strip(line)
CPSK coherent phase shift keying
CPT charge, parity, time
CPU central processing unit
CPV common pressure vessel
CPW coplanar waveguide
CQPSK coherent quadrature PSK
CRBR Clinch River Breeder Reactor Project
CRC cyclic redundancy check
CRCW concurrent read, concurrent write
CRDA control rod drop accident
CREAM cosmic radiation environment and activation monitor
CREDO cosmic radiation environment dosimetry experiment
CREW concurrent read, exclusive write
CRMA cyclic reservation multiple access
CRNL Chalk River Nuclear Laboratories
CRO cathode ray oscilloscope
CRSR coherent resonant Stokes rotation
CRT cathode ray tube
CS coupled states
CSCW computer supported cooperative work
CSI current source invertor
CSM continuous slowing down models
CSMA/CD CSMA with collision detection
CSMA carrier sense multiple access
CSP channel substrate planar *or* chip-scale packaging *or* communicating sequential processes *or* constraint satisfaction problem
CSRS coherent Stokes-Raman spectra (-oscopy)
CSS contact start/stop
CSSB/AM companded single-sideband AM
CSTR continuous stirred tank reactor
CSVT close-spaced vapour transport
CT computerised tomography *or* current transformer
CT1/2/3 cordless telephony (of 1st, 2nd, 3rd generation)
CTD charge transfer device
CTE coefficient of thermal expansion
CTI computer telephony integration
CTL complementary-transistor logic
CTR controlled thermonuclear reactor
CUI character-based user interface
CUT circuit under test
CV cataclysmic variable(s)
CVD chemical vapour deposition
CVI chemical vapour infiltration
CVSDM continuously-variable slope delta modulation
CVT chemical vapour transport
CW continuous wave
CZ Czochralski
D/A digital-to-analogue
DAB digital audio broadcasting
DAC digital-to-analogue conversion(-ter)
DACS digital access and cross-connect system
DAD digital audio disc
DAG directed acyclic graph
DAI distributed artificial intelligence
DAMA demand assigned multiple access
DAQ data acquisition
DARMA deterministic autoregressive moving average
DARPA Defense Advanced Research Projects Agency
DASD direct access storage device
DAT digital audio tape
DATAC digital autonomous terminal access communication
DAW dry active waste
DBMS database management system
DBPSK differential-binary phase-shift keying
DBR distributed Bragg reflector
DBS direct broadcasting by satellite
DC direct current
DC-PBH double-channel PBH
DCA direct chip attach *or* dynamic channel allocation
DCE distributed computing environment

DCEL	direct current electroluminescent
DCFL	direct-coupled FET logic
DCG	dichromated gelatin
DCLC	drift cyclotron loss cone (instability)
DCOM	Distributed Component Object Model
DCS	digital cross-connect system *or* digital cellular service (system) *or* distributed control system
DCT	discrete cosine transform
DCTL	direct-coupled transistor logic
DCVS	differential cascode voltage switch
DDC	direct digital control
DDE	dynamic data exchange
DDL	diode-diode logic
DDS	direct digital synthesis
DE	differential equation
DECENT	distribution of exact classical energy transfer
DECT	digital European cordless telecommunication (*or* telephone)
DEDS	discrete event dynamic system
DEFT	density functional theory
DEM	digital elevation model(s)
DEMUX	demultiplexer(-ing)
DENOX	nitrogen oxides removal
DES	data encryption standard
DESIRE	diffusion enhanced silylating resist
DESY	Deutsches Electron Synchrotron
DEVS	discrete event system specification
DF	Dirac-Fock
DFB	distributed feedback
DFE	decision feedback equaliser *or* design for environment
DFG	difference frequency generation
DFM	design for manufacture(-ability)
DFT	discrete Fourier transform *or* design for testability
DFWM	degenerate four-wave mixing
DGPS	differential GPS
DH	double heterostructure
DHBT	double heterojunction bipolar transistor
DHF	Dirac-Hartree-Fock
DHT	discrete Hartley transform *or* discrete Hilbert transform
DIAL	differential-absorption lidar
DIBL	drain induced barrier lowering
DIC	digital integrated circuit
DIET	desorption induced by electronic transitions
DIL	dual-in-line
DIP	DIL package
DIS	deep inelastic scattering *or* distributed interactive simulation
DITE	Divertor in Torus Experiment
DLA	diffusion limited aggregation
DLC	diamond-like carbon
DLL	delay lock loop *or* dynamic link library
DLMS	delayed least mean squares
DLTS	deep level transient spectra (-oscopy)
DM	delta modulation
DMA	direct memory access
DMC	dynamic matrix control
DMD	digital micromirror device
DMM	digital multimeter
DMOS	double-diffused metal-oxide-semiconductor
DMSK	differential minimum shift keying
DMSO	dimethylsulphoxide
DMU	decision-making unit
DNA	deoxyribonucleic acid *or* Digital Network Architecture
DNF	disjunctive normal form
DNMR	double nuclear magnetic resonance
DNS	domain name system
DNTS	digital data exchange network testing system
DOA	direction of arrival
DOBAMBC	p-decyloxybenzylidene p'-amino 2-methyl butyl cinnamate
DoD	Department of Defense (USA)
DOE	Department of Energy (USA) *or* design of experiments *or* diffractive optical element
DOF	degree(s) of freedom
DOI	document object identifier
DOPSK	differential offset phase shift keying
DORIS	Doppel-Ring-Speicher
DOS	disc operating system *or* density of states
DOVETT	double velocity transit time
DOX	design of experiments
DP	data processing
DPCM	differential PCM
DPDA	deterministic pushdown automaton
DPIV	digital particle image velocimetry
DPLL	digital phase locked loop
DPOAE	distortion product otoacoustic emission
DPPC	dipalmitoyl phosphatidyl chloride
DPPH	diphenylpicrylhydrazyl
DPS	distributed parameter system
DPSK	differential phase shift keying
DQDB	distributed queue dual bus
DQPSK	differential quadrature PSK
DRAM	dynamic RAM
DRO	dielectric resonator oscillator
DS-SS	direct sequence spread spectrum
DS-SSMA	direct sequence SSMA
DSA	digital subtraction angiography
DSAM	Doppler shift attenuation method
DSB	double sideband
DSC	differential scanning calorimetry
DSF	dispersion shifted fibre
DSI	digital speech interpolation
DSL	digital subscriber line
DSM	demand side management
DSO	digital storage oscilloscope
DSP	digital signal processor (-ing)
DSRC	dedicated short-range communications
DSS	decision support system *or* digital subscriber signalling
DST	discrete sine transform
DTA	differential thermal analysis
DTL	diode transistor logic
DTMF	dual tone multi-frequency
DTP	desktop publishing
DTPP	Demonstration Tokamak Power Plant
DTU	dual topological unitarisation
DUT	device under test
DUV	deep UV
DV-Xα	discrete variational Xα
DVD	digital versatile (*or* video) disc
DVI	digital video interactive
DVM	digital voltmeter

DWBA distorted wave Born approximation
DWDM dense WDM (multiple access)
DWIA distorted wave impulse approximation
DWPF Defence Waste Processing Facility
E. coli Escherichia coli
E/D enhancement-/depletion-mode
E1 electric dipole
E2 electric quadrupole
E^2PROM electrically erasable PROM
EAROM electrically alterable ROM
EAS extensive air shower
EAX electronic automatic exchange
EB exponential Born
EBBA 4-ethoxybenzylidene-4n-butylaniline
EBIC electron beam induced current(s)
EBIS electron beam ion source
EBIT electron beam ion trap
EBL explanation-based learning
EBR experimental breeder reactor
EBT Elmo Bumpy Torus
EBU European Broadcasting Union
ECA event-condition-action
ECALE electrochemical atomic layer epitaxy
ECC emergency core cooling *or* error correction code
ECCM electronic counter-counter measures
ECCS emergency core cooling system
ECELR Epithermal Critical Experiment Laboratory Reactor
ECG electrocardiography (-gram)
ECL emitter coupled logic
ECM electronic countermeasures
ECMWF European Centre for Medium Range Weather Forecasts
ECoG electrocortiography (-gram)
ECR electron cyclotron resonance
ECRH electron cyclotron resonance heating
EDA ethylene diamine *or* electronic design automation
EDAX energy-dispersive X-ray analysis
EDF Electricité de France
EDFA erbium-doped fibre amplifier
EDI electronic data interchange
EDIF electronic data interchange format
EDM electrical discharge machining
EDP electronic data processing
EDS energy dispersive spectra (-oscopy)
EDTA ethylene diamine tetra-acetic acid
EDTV extended definition TV
EDW electron density wave
EDX energy-dispersive X-ray
EEG electroencephalography (-gram)
EELFS electron energy loss fine structure
EELS electron energy loss spectra (-oscopy)
EEPLD electrically erasable PLD
EEPROM electrically erasable PROM
EFG edge-defined film fed growth
EFIE electric field integral equation
EFL emitter-follower logic *or* emitter function logic
EFM extended Flygare method
EFT electronic funds transfer
EGA Enhanced Graphics Adaptor
EGG electrogastrography (-gram)
EHD electrohydrodynamics
EHDTV enhanced high-definition TV
EHF extremely high frequency
EHP electron-hole potential method
EHT extended Hückel theory *or* extra high tension
EHV extra high voltage
EIA Electronic Industries Association
EIRP equivalent isotropically radiated power
EIS electrochemical impedance spectroscopy
EISA extended Industry Standard Architecture
EKF extended Kalman filter
EKG electrokymography (-gram)
EL electroluminescent(-ence)
ELDOR electron electron double resonance
ELF extremely low frequency
ELNES energy loss near edge structure
ELO epitaxial lateral overgrowth
EM electromagnetic *or* expectation maximisation
EMC electromagnetic compatibility *or* European Muon Collaboration
EMF electromotive force
EMG electromyography (-gram)
EMI electromagnetic interference
EMP electromagnetic pulse
EMS energy management system
EMTP electromagnetic transients program
ENDOR electron nuclear double resonance
ENEL Ente Nazionale per l'Energia Elettrica (Italian National Electric Energy Agency)
ENG electronic news gathering
ENOB effective number of bits
ENSO El Nino - Southern Oscillation
EO electro-optic(al)
EOF end-of-file
EOG electrooculography (-gram)
EOQ economic order quantity
EOS electrical overstress
EPA Environmental Protection Agency (USA)
EPDM ethylene propylene diene monomer
EPI echo planar imaging
EPLD electrically programmable logic device
EPMA electron probe microanalysis
EPR Einstein-Podolsky-Rosen *or* electron paramagnetic resonance *or* ethylene propylene rubber *or* European Pressurised water Reactor
EPRI Electric Power Research Institute
EPROM erasable PROM
EPUT events per unit time
ER electrorheology(-ical) *or* entity-relationship
ERBE Earth Radiation Budget Experiment
ERDA elastic recoil detection analysis
EREW exclusive read, exclusive write
ERG electroretinography (-gram)
ERP effective radiated power
ES expert system
ESA European Space Agency
ESCA electron spectroscopy for chemical analysis
ESCAR Experimental Superconducting Accelerating Ring
ESD electron stimulated desorption *or* electrostatic discharge
ESDIAD electron stimulated desorption ion angular distributions

ESF	engineering safety features
ESM	electronic support measures
ESOC	European Space Operations Centre
ESP	electrostatic precipitators
ESPI	electronic speckle pattern interferometry
ESPRIT	estimation of signal parameters by rotational invariance techniques *or* European Strategic Programme for Research in Information Technology
ESR	electron spin resonance *or* equivalent series resistance
ESS	electronic switching system *or* environmental stress screening
ESTELLE	Extended State Transition Language
ET	bis(ethylenedithio)-tetrathiafulvalene
ETA-II	Engineering Test Accelerator-II
ETACS	Extended Total Access Communications System
ETM	engineering test model
ETSI	European Telecommunications Standards Institute
ETV	enhanced TV
EU	European Union
EUT	equipment under test
EUV	extreme UV
EV	electric vehicle
EW	electronic warfare
EX-OR	exclusive OR (logic)
EXAFS	extended X-ray absorption fine structure
EZW	embedded zerotree wavelet
F-N	Fowler-Nordheim
F/V	frequency-to-voltage
FAA	Federal Aviation Administration
FACTS	flexible AC transmission system
FAMOS	floating gate avalanche MOS
FBC	fluidised bed combustion
FBG	fibre Bragg grating
FBL	fly-by-light
FBR	fast breeder reactor
FCAW	flux-cored arc welding
FCC	face-centred cubic *or* Federal Communications Commission (USA)
FCFS	first come first served
FCI	fuel-cladding interaction
FCMA	frequency comb multiple access
FCOB	flip chip on board
FCT	field-controlled thyristor
FDD	floppy disc drive *or* frequency division duplex
FDDI	fibre distributed data interface
FDM	frequency division multiplex(ing)
FDMA	frequency division multiple access
FDNC	frequency dependent negative conductance
FDNR	frequency dependent negative resistance
FDTD	finite difference time-domain
FDTS	fixed delay tree search
FEA	finite element analysis *or* field emitter array
FEC	forward error correction
FECFET	floated electron channel FET
FECL	feedback ECL
FED	Fusion Engineering Device (USA) *or* field emission display
FEDC	Fusion Engineering Device Centre (USA)
FEL	free electron laser
FEM	field emission microscopy *or* finite element method
FER	Fusion Experimental Reactor (Japan) *or* frame error rate
FES	functional electrical stimulation
FET	field effect transistor
FFH	fast frequency hopping
FFHR	fusion-fission hybrid reactor
FFT	fast Fourier transform
FFTF	Fast Flux Test Facility
FGD	flue gas desulphurisation
FGM	functionally graded material(s)
FH-SS	frequency hopped spread spectrum
FH-SSMA	frequency hopped SSMA
FHNC	Fermi hypernetted chain
FIB	focused ion beam
FIFO	first in, first out
FIM	field ion microscopy
FIMOS	floating gate ionisation injection metal-oxide-semiconductor
FIPOS	full isolation by porous oxidised silicon
FIR	far IR *or* finite impulse response
FISH	fluorescence in-situ hybridisation
FISO	fast in, slow out
FITL	fibre in the loop
FLAIR	flow-sensitive alternating inversion recovery
FLC	ferroelectric liquid crystal
FLCD	ferroelectric liquid crystal display
FLIR	forward looking infra-red
FLL	frequency locked loop
FLOPS	floating point operation(s) per second
FLOTOX	floating-gate tunnel oxide
FM	frequency modulation
FMEA	failure mode and effects analysis
FMECA	failure modes effects and criticality analysis
FMIT	Fusion Materials Irradiation Test Facility
FMR	ferromagnetic resonance
fMRI	functional magnetic resonance imaging
FMS	flexible manufacturing system *or* flight management system
FOG	fibre optic gyroscope
FORTRAN	Formula Translation (language)
FOTS	fibre optic transmission system
FOV	field of view
FP	functional programming
FPA	focal plane array
FPAA	field programmable analogue array
FPC	fusion power core
FPD	flat panel display
FPGA	field programmbale gate array
FPLA	field programmable logic array
FPLMTS	future public land mobile telecommunication system
FPT	finite perturbation theory
FQHE	fractional quantum Hall effect
FRAM	ferroelectric random access memory
FRAP	fluorescence recovery after photobleaching
FRED-FET	fast recovery epitaxial diode FET
FRMR	field reversed mirror reactor
FROG	frequency resolved optical gating
FSDE	fission suppressed direct enrichment (breeder blanket)
FSGO	floating spherical Gaussian orbitals

FSK	frequency-shift keying
FSM	finite state machine
FSR	full scale range
FSS	fixed satellite service *or* frequency selective surface
FT	Fourier transform
FTIR	Fourier transform IR *or* frustrated total internal reflection
FTP	File Transfer Protocol
FTR	Fast Test Reactor
FTTB	fibre-to-the-building
FTTC	fibre-to-the-curb
FTTH	fibre-to-the-home
FWHM	full width half maximum
FWM	four wave mixing
FZ	floating zone
FZP	Fresnel zone plate
GA	genetic algorithm
GABA	γ-aminobutyric acid
GAMBIT	gate modulated bipolar transistor
GANIL	Grand Accelerateur National à Ions Lourds
GASH	guanidine aluminium sulphate hexahydrate
GCB	gas circuit breakers
GCC	gasification combined cycle
GCFR	gas-cooled fast breeder reactor
GCHWR	gas cooled heavy water moderated reactor
GCM	general circulation model *or* generator coordinate method
GCR	group code recording
GDR	giant dipole resonance
GDSS	group decision support system
GEO	geostationary orbit
GETR	General Electric Test Reactor
GF	Galois field
GFSK	Gaussian frequency shift keying
GHF-NO-CI	generalised Hartree-Fock/natural orbital/configuration interactions
GIAO	gauge-invariant atomic orbitals
GIC	generalised immittance convertor *or* geomagnetically induced currents *or* graphite intercalation compound
GIDL	gate-induced drain leakage
GIF	graphical image format
GIS	gas-insulated system (substation or switchgear) *or* geographic information system
GITL	gas-insulated transmission line
GKS	Graphical Kernel System
GLONASS	Global Orbiting Navigation Satellite System
GMA	gas metal arc
GMDH	group method of data handling
GMDSS	Global Maritime Distress and Safety System
GMI	giant magnetoimpedance
GMR	giant magnetoresistance *or* giant monopole resonance
GMRF	guided mode resonance filter
GMSK	Gaussian filtered MSK
GMW	Gordon-Mills-Welch
GNSS	Global Navigation Satellite System
GO	Gaussian orbitals *or* geometrical optics
GOI	gate oxide integrity
GP	Guinier-Preston
GPC	generalised predictive control
GPED	gas phase electron diffraction
GPIB	general-purpose interface bus
GPM	ground potential model
GPS	Global Positioning System
GQR	giant quadrupole resonance
GR	general relativity
GRIN	graded (*or* gradient) refractive index
GRINSCH	gradient-index separate confinement heterostructure
GSI	gigascale integration
GSM	global system for mobile communications *or* Groupe Speciale Mobile
GSMBE	gas-source molecular beam epitaxy
GSPC	gas scintillation proportional chamber (*or* counter)
GT	group technology
GTAW	gas tungsten arc welding
GTD	geometrical theory of diffraction
GTHTGR	gas turbine HTGR
GTO	gate turn-off *or* Gaussian-type orbitals
GUI	graphical user interface
GUT	grand unified theory
GVB	generalised valence bond
HALT	highly accelerated life test(ing)
HASL	hot air solder levelling
HASS	highly accelerated stress screening
HAST	highly accelerated stress test(ing)
HAWT	horizontal axis wind turbines
HB	horizontal branch
HBM	human body model
HBS	home bus system
HBT	heterojunction bipolar transistor *or* N-(p-hexyloxybenzylidene)-p-toluidene
HCDA	hypothetical core disruptive accident
HCI	human-computer interaction
HCMOS	high-speed complementary MOS
HCP	hexagonal close packed
HCSEL	horizontal cavity surface emitting laser
HD-MAC	high-definition MAC
HD-VCR	high-definition VCR
HDD	hard disc drive
HDDR	hydrogenation disproportionation desorption recombination
HDI	high-density interconnect
HDL	hardware description language
HDLC	high-level data link control
HDM	hot dark matter
HDMI	high-density multichip interconnect
HDPE	high-density polyethylene
HDSL	high bit-rate digital subscriber lines
HDTV	high-definition television
HEED	high-energy electron diffraction
HeLa	Henrietta Lacks
HEMP	high-altitude electromagnetic pulse
HEMT	high electron mobility transistor
HET	hot electron transistor
HEU	highly enriched uranium (93% U235)
HEU/Th	highly enriched U/Th fuel
HEXFET	hexagonal MOSFET
HF	Hartree-Fock *or* high-frequency
HFC	hybrid fibre coax
HFEF	Hot Fuel Examination Facility
HFET	heterojunction (*or* heterostructure) FET
HFIR	high flux isotope reactor

HFITR	High Field Ignition Test Reactor
HFS	Hartree-Fock-Slater *or* hyperfine structure
HGMS	high-gradient magnetic separation
HI	heavy ion
HID	high-intensity discharge
HIFET	heterointerface FET
HIGFET	heterostructure insulated gate FET
HIP	hot isostatic pressing
HIPERLAN	high-performance (radio) LAN
HIPPI	high-performance parallel interface
HIRF	high-intensity radiated fields
HIS	hospital information system
HIXE	heavy ion induced X-ray emission
HJBT	heterojunction bipolar transistor
HJFET	heterojunction FET
HLA	High Level Architecture
HLL	high-level language
HLLW	high-level liquid waste
HLW	high-level waste
HMC	hidden Markov chain
HMD	helmet mounted display
HMM	hidden Markov model
HMO	health maintenance organisation *or* Hückel molecular orbitals
HMOS	high-performance metal-oxide-semiconductor
HMTSeF	hexamethylene-tetraselenafulvalene (-inium)
HMTTF	hexamethyltetrathiofulvalene (-inium)
HOAB	heptyloxyazoxybenzene
HOE	holographic optical elements
HOMO	highest occupied molecular orbitals
HOPG	highly oriented pyrolytic graphite
HOS	higher order statistics
HPCI	high-pressure coolant injection
HPCS	high-pressure core sprays
HPF	High Performance FORTRAN
HREELS	high-resolution EELS
HREM	high-resolution electron microscopy
HRSG	heat recovery steam generator
HRTEM	high-resolution TEM
HRV	heart rate variability
HSLA	high-strength low alloy (steel)
HSLAN	high-speed LAN
HST	Hubble Space Telescope
HT	high tension
HTGR	high-temperature gas-cooled reactor
HTGRSC/C	HTGR steam cycle cogeneration
HTML	Hypertext Markup Language
HTSC	high-temperature superconductor
HTTP	Hypertext Transfer Protocol
HTTR	High-Temperature Engineering Test Reactor
HUD	head-up display
HV	high voltage
HVAC	heating, ventilation and air conditioning *or* high-voltage alternating current
HVDC	high-voltage direct current
HVEM	high-voltage electron microscopy
HVIC	high-voltage integrated circuit
HWIR	hardware-in-the-loop
HWLWR	heavy water moderated LWR
HWR	heavy water reactor
HZE	high Z and energy
HZP	hot zero power
I-FOG	interferometric fibre-optic gyroscope
I-V	current-voltage
i.i.d.	independently identically distributed
I/O	input/output
I^2L	integrated injection logic
I^3L	isoplanar I^2L
IAEA	International Atomic Energy Agency
IAR	isobaric analogue resonance
IAS	isobaric analogue state
IBA	interacting boson approximation
IBAD	ion beam assisted deposition
IBCN	integrated broadband communication network
IBFA	interacting boson-fermion approximation
IBM	interacting boson model *or* International Business Machines
IBOC	in-band on-channel
IBPBAC	isobutyl-4-(4'-phenylbenzylidene-amino) cinnamate
IBT	insulated base transistor
IC	integrated circuit
ICA	independent component analysis
ICAM	integrated computer-assisted manufacturing
ICB	ionised cluster beam
ICDF	intermediate coupling Dirac-Fock
ICE	in-circuit emulator
ICF	inertial confinement fusion
ICMA	idle signal casting multiple access
ICP	inductively coupled plasma
ICPP	Idaho Chemical Processing Plant
ICRF	ion cyclotron range of frequencies
ICRH	ion cyclotron resonance heating
ICTS	isothermal capacitance transient spectra (-oscopy)
ICU	intensive care unit
IDDQ	quiescent power supply current
IDEF	ICAM definition
IDFL	integral diode FET logic
IDL	interface definition language
IDT	interdigital transducer
IDTV	improved definition television
IEC	interexchange carrier *or* International Electrotechnical Commission
IEE	Institution of Electrical Engineers
IEEE	Institute of Electrical and Electronics Engineers
IEPA	independent electron pair approximation
IES	Institute of Environmental Sciences
IETS	inelastic electron tunnelling spectra (-oscopy)
IF	intermediate-frequency
IFA	ionisation front accelerator
IFE	intelligent front end
IFF	identification friend or foe
IFIP	International Federation for Information Processing
IFM	instantaneous frequency measurement
IFS	iterated function system
IGBT	insulated gate bipolar transistor
IGCC	integrated gasification combined cycle
IGES	Initial Graphics Exchange Specification
IGFET	insulated gate FET
IgG	immunoglobin
IGT	insulated gate transistor
IHEP	Institute of High Energy Physics
IIR	infinite impulse response

IKBS	intelligent knowledge-based system
IKO	Institute v. Kernph Ouder (Amsterdam)
ILD	interlayer dielectric
ILP	inductive logic programming
ILS	instrument landing system
ILW	intermediate level (radioactive) waste
IM	induction motor
IM-DD	intensity modulated direct detection
IMA	integrated modular avionic
IMAPS	International Microelectronics and Packaging Society
IMD	intermodulation distortion
IMPATT	impact avalanche transit time
IN	intelligent network
INDO	incomplete neglect of differential overlap
INDOR	internuclear double resonance
INEPT	insensitive nuclei enhanced by polarisation transfer
ING	intense neutron generator
INO	iterative natural orbital
INS	inertial navigation system *or* Information Network System
INSPEC	Information Services for the Physics and Engineering Communities
INTELSAT	International Telecommunications Satellite Consortium
INTOR	International Tokamak Reactor
INTUG	International Trade and User Group
IOCω	inclusion of the overlap charges in the omega
IP	Internet Protocol
IPC	Institute for Interconnecting and Packaging Electronic Circuits
IPI	intelligent peripheral interface
IPSE	integrated programming support environment *or* integrated project support environment
IPSS	international packet switching system
IQHE	integer quantum Hall effect
IR	infra-red
IRBIC	IR beam-induced current(s) (*or* contrast)
IREB	intense relativistic electron beam
IRED	IR emitting diode
IRFPA	IR focal plane array
IRL	Internet reconfigurable logic
IRQ	interrupt request
IRRAS	IR reflection absorption spectra(-oscopy)
IRS	information retrieval system *or* Internal Revenue Service
IRST	IR search and track
IS	information system
ISA	Industry Standard Architecture *or* Instrument Society of America
ISAR	inverse synthetic aperture radar
ISDN	integrated services digital network
ISDSN	integrated services digital satellite network
ISFET	ion-sensitive FET
ISHM	International Society for Hybrid Microelectronics
ISI	intersymbol interference
ISL	integrated Schottky logic *or* inter-satellite link
ISM	industrial, scientific and medical
ISM	interstellar medium
ISO	independent system operator(s) *or* International Standards Organization
ISP	Internet service provider
ISPBX	integrated services PBX
ISR	intersecting storage ring
ISS	ion scattering spectroscopy
ISX	impurity study experiment
IT	information technology
ITC	ionic thermocurrents
ITEP	Institute of Theoretical and Experimental Physics
ITO	indium tin oxide
ITOX	internal thermal oxidation
ITR	Ignition Test Reactor
ITU	International Telecommunication Union
IU	Indiana University (USA)
IVHS	intelligent vehicle highway system
IVO	improved virtual orbitals
IVP	initial value problem
J^{π}	spin/parity (nuclear levels)
JAERI	Japan Atomic Energy Research Institute
JANET	Joint Academic Network
JCL	job control language
JDK	Java Development Kit
JEDEC	Joint Electronic Device Engineering Council
JET	Joint European Torus
JFET	junction FET
JINR	Joint Institute for Nuclear Research
JIT	just in time
JPEG	Joint Photographic Experts Group
JSD	Jackson system development
JT-60	Japanese Tokamak-60
JTAG	Joint Test Action Group
JTC	joint transform correlator
JTE	junction termination extension
JTIDS	Joint Tactical Information Distribution System
JVD	jet vapour deposition
KADS	knowledge acquisition and design structuring
KBS	knowledge-based system
KDD	knowledge discovery in databases
KdV	Korteweg-de Vries
KEK	Japan National Laboratory for High Energy Physics
KGD	known good die
KKR	Korringa-Kohn-Rostoker
LAAS	local-area augmentation system
LAMPF	Los Alamos Meson Physics Facility
LAN	local-area network
LATA	local access and transport area
LAWN	local-area wireless network
LB	Langmuir-Blodgett
LBIC	light beam induced current(s)
LBLOCA	large break LOCA
LC	inductance-capacitance
LCA	logic cell array
LCAO	linear combination of atomic orbitals
LCBO	linear combinations of (semi-localised) band orbitals
LCC	leadless chip carrier
LCCC	leadless ceramic chip carrier
LCD	liquid crystal display/device
LCI	load commutated inverter
LCP	Large Coil Program *or* least cost planning
LCTF	Large Coil Test Facility
LCTV	liquid crystal television

LD	laser diode
LDA	laser Doppler anemometry (-meter) *or* local density approximation
LDD	lightly doped drain
LDI	lossless discrete integrator
LDMOS	lateral double-diffused metal oxide semiconductor
LDPE	low density polyethylene
LDV	laser Doppler velocimetry (-meter)
LEAR	Low Energy Antiproton Ring
LEC	liquid encapsulated Czochralski *or* local exchange carrier
LED	light emitting diode
LEED	low energy electron diffraction
LEFD	Large Experimental Fusion Device
LEIS	low energy ion scattering
LEMP	lightning electromagnetic pulse
LEO	lateral epitaxial overgrowth *or* low-Earth orbit
LEP	Large Electron Positron (CERN)
LET	linear energy transfer
LEU	low enrichment uranium (10% U235)
LEU/Th	low enrichment U/Th fuel
LF	low-frequency
LFSR	linear feedback shift register
LGA	land grid array
LHC	Large Hadron Collider (CERN)
LHPG	laser heated pedestal growth
LHRH	lower hybrid resonance heating
LIF	laser induced fluorescence
LIFO	last in, first out
LIGA	lithography galvanoformung abformung
LIM	linear induction motor
LIME	laser induced magnetically enhanced
LINAC	linear accelerator
LIS	laboratory (*or* library) information system
LISP	List Processor (language)
LLTR	Large Leak Test Rig
LLW	low level (radioactive) waste
LMC	Large Magellanic Cloud
LMDS	local multichannel (*or* multipoint) distribution system
LME	liquid metal embrittlement
LMFBR	liquid metal fast breeder reactor
LMI	linear matrix inequalities
LMIS	liquid metal ion source
LMR	liquid metal reactor *or* land mobile radio
LMS	least mean square(s) *or* land mobile satellite
LMSS	land mobile satellite system
LMTO	linear combination of muffin tin orbitals
LMXB	low-mass X-ray binary
LNA	low noise amplifier
LNB	low noise block
LNG	liquified natural gas
LO	local oscillator *or* longitudinal optical
LOCA	loss of coolant accident
LOCE	loss of coolant experiment
LOCOS	local oxidation of silicon
LOF	loss of flow
LOFT	Loss of Flow Test Facility
LOFW	loss of feedwater
LOLP	loss of load probability
LOOSP	loss of on-site power
LOS	line of sight *or* loss of signal
LOTOS	Language Of Temporal Ordering Specification
LP	linear programming
LPC	linear predictive coding
LPCS	low pressure core spray
LPCVD	low pressure CVD
LPE	liquid phase epitaxy
LPEE	liquid phase electroepitaxy
LPFL	low pinchoff-voltage FET logic
LPI	low probability of intercept *or* liquid photoimageable
LQ	linear quadratic
LQG	linear quadratic Gaussian
LRO	long-range order
LSA	least squares approximation *or* limited space charge accumulation
LSB	least significant bit
LSD	local spin density *or* loop shut-down
LSF	line spectral frequency
LSI	large-scale integration
LSP	line spectrum pair
LSPB	Large Scale Prototype Breeder
LSSD	level sensitive scan design
LSTF	Large Scale Test Facility
LTCC	low-temperature co-fired ceramic
LTE	local thermodynamic equilibrium
LTI	linear time invariant
LTR	loop transfer recovery
LUMO	lowest unoccupied molecular orbitals
LV	low voltage *or* left ventricle
LVQ	learning vector quantisation
LW	long-wave
LWBR	light water breeder reactor
LWHCR	light water high convertor reactor
LWIR	long-wavelength IR
LWR	light water reactor
M-QAM	multilevel QAM
M1	magnetic dipole
M2	magnetic quadrupole
MAC	multiplexed analogue components *or* media access control
MAG	metal arc gas
MAGFET	magnetic field sensitive FET
MAGLEV	magnetic levitation
MAI	multiple access interference
MAN	metropolitan-area network
MAP	Manufacturing Automation Protocol *or* maximum a posteriori *or* medium access protocol
MARC	machine readable catalogue
MARS	Mirror Advanced Reactor Study
MAS	magic angle spinning
MATE	modular automatic test equipment
MBBA	4-methoxybenzylidene-4'n-butylaniline
MBC	meteor burst communication
MBE	molecular beam epitaxy *or* multi-band excitation
MBPT	many body perturbation theory
MBR	model-based reasoning
MCA	multichannel analyser
MCCB	moulded-case circuit breakers
MCCI	molten core-concrete interaction
MCD	magnetic circular dichroism
MCFC	molten carbonate fuel cell
MCFR	magnetic confinement fusion reactor

MCM	multichip module *or* multicarrier modulation
MCP	microchannel plate
MCSCF	multiconfiguration SCF
MCVD	modified chemical vapour deposition
MCXα	multiconfiguration Xα
MDS	maximum distance separable
MEC	molecular electron correlation(s)
MEG	magnetoencephalography (-gram)
MEI	measured equation of invariance
MELP	mixed excitation linear prediction
MEMS	microelectromechanical system
MERIE	magnetically enhanced reactive ion etching
MESFET	metal-semiconductor FET
MEU	medium enrichment uranium (20% U235)
MEU/Th	medium enrichment U/Th fuel
MF	medium-frequency
MFIE	magnetic field integral equation
MFM	magnetic force microscopy
MFP	mean free path
MFQ	maximally flat quadratic
MFR	mirror fusion reactor
MFSFET	metal-ferroelectric-semiconductor FET
MFSK	multiple frequency shift keying
MFTF	Mirror Fusion Test Facility
MHD	magnetohydrodynamics
MHEG	Multimedia and Hypermedia Experts Group
MHS	message handling system
MHTGR	modular HTGR
MIC	microwave integrated circuit
MID	magnetically insulated diode *or* moulded interconnect device
MIDI	musical instrument digital interface
MIDP	microwave induced delayed phosphorescence
MIG	metal inert gas *or* metal-in-gap
MIL-STD	military standard
MIM	metal-insulator-metal
MIMD	multiple input (instruction), multiple data
MIMIC	millimetre-wave monolithic integrated circuit
MIMO	multiple input, multiple output
MIN	multiprocessor interconnection network
MIND	mass impregnated non-draining
MINDO	modified incomplete NDO
MIPS	million instructions per second
MIS	management information system *or* metal-insulator-semiconductor
MISFET	metal-insulator-semiconductor FET
MISO	multiple input, single output
MIT	Massachusetts Institute of Technology (USA)
MITATT	mixed tunnelling avalanche transit time
ML	Martin-Löf
ML-EM	maximum likelihood expectation maximization
MLB	multilayer board
MLC	multilayer ceramic
MLE	maximum likelihood estimation *or* molecular layer epitaxy
MLP	multilayer perceptron
MLS	microwave landing system *or* multi-level secure
MLSE	maximum likelihood sequence estimation
MLTF	multilayer thick film
MLW	medium level (radioactive) waste
MM	millimetre
MMC	metal-matrix composite
MMDS	microwave (*or* multichannel) multipoint distribution system
MMF	magnetomotive force *or* multimode fibre
MMI	man-machine interface
MMIC	monolithic microwave integrated circuit
MMSE	minimum mean squared error
MMU	memory management units
MNDO	modified neglect of differential overlap
MNOS	metal-nitride-oxide-semiconductor
MO	molecular orbitals
MOBILE	monostable-bistable transition logic element
MOCLD	metal-organic chemical liquid deposition
MOCVD	metal-organic chemical vapour deposition
MODFET	modulation doped FET
MODOR	microwave-optical double resonance
MODPOT	modulator potential
MOKE	magneto-optical Kerr effect
MOMBE	metal-organic MBE
MONOS	metal-oxide-nitride-oxide-semiconductor
MOPA	master oscillator power amplifier
MORB	mid-ocean ridge basalt
MOS	mean opinion score *or* metal-oxide-semiconductor
MOSFET	metal-oxide-semiconductor FET
MOSIS	metal oxide semiconductor implementation service
MOST	metal-oxide-semiconductor transistor
MOV	metal oxide varistor
MOVPE	metal-organic vapour phase epitaxy
MOX	mixed oxide fuel
MP-CELP	multi-pulse CELP
MPEG	Moving Picture Experts Group
MPH	moving plasmoid heater
MPI	Message Passing Interface
MPP	massively parallel processing
MPPT	maximum power point tracking
MPSK	multiple phase shift keying
MPU	microprocessing unit
MQORC	modified quadrature overlapped raised cosine
MQW	multiple quantum well
MR	magnetoresistive
MRAC	model reference adaptive control
MRC	minimum resolvable contrast
MRD	multiple-reference double excitation
MRI	magnetic resonance imaging
MRINDO	modified Rydberg INDO
MRP	manufacturing resources planning *or* materials requirements planning
MRS	monitored retrievable storage (radioactive waste) *or* magnetic resonance spectroscopy
MRT	minimum resolvable temperature
MS	management science
MSB	most significant bit
MSE	mean square error
MSELP	mixed sinusoidally excited linear prediction
MSGD	micro-strip gas detector
MSI	medium scale integration
MSK	minimum shift keying
MSM	metal-semiconductor-metal

MSR	molten salt reactor
MSS	mobile satellite system
MSSM	minimal supersymmetric standard model
MSSW	magnetostatic surface wave
MSU	Michigan State University
MSW	magnetostatic waves
MSXα	multiple scattering Xα
MT	machine translation *or* magnetotelluric
MTBF	mean time between failures
MTF	modulation transfer function
MTI	moving target indicator
MTL	merged-transistor logic
MTR	maximum transition run-length
MTTF	mean time to failure
MTTR	mean time to repair
MTXα	muffin-tin Xα
μ-TAS	micro total analysis system
μCF	muon-catalysed fusion
μP	microprocessor
μSR	muon spin rotation (resonance)
MUF	material unaccounted for *or* maximum usable frequency
MUMPS	Multi-User Multi-Programming System
MUSE	multiple sub-Nyquist sampling encoding
MUSIC	multiple signal characterisation
MUX	multiplexer(-ing)
MV	medium voltage
MVDR	minimum variance distortionless response
MVDS	multipoint video distribution system
MVTL	modified variable threshold logic
MWIR	mid-wavelength IR
MWNT	multi-wall(ed) nanotube
MWPC	multiwire proportional chamber
NA	numerical aperture
NAA	neutron activation analysis
NAL	National Accelerator Laboratory
NAND	NOT-AND (logic)
NAPLPS	North American Presentation Level Protocol Syntax
NASA	National Aeronautics and Space Administration
NASICON	sodium zirconium silicate phosphate
NATO	North Atlantic Treaty Organisation
NAVSTAR	Navigational Satellite Timing and Ranging
NBETF	Neutral Beam Engineering Test Facility
NBFM	narrowband frequency modulation
NBI	narrow band interference *or* neutral beam injection
NBPS	neutral beam power systems
NC	numerical control
NCAR	National Center for Atmospheric Research (USA)
NCBR	nitrine cooled breeder reactor
NCMET	non-closed shell many electron theory
NCSL	National Conference of Standards Laboratories
NDC	negative differential conductance (-ivity)
NDDO	neglect of diatomic differential overlap
NDE	nondestructive evaluation
NDO	neglect of differential overlap
NDR	negative differential resistance
NDRO	nondestructive readout
NDSF	non-dispersion-shifted fibre
NDT	nondestructive testing
NEA	negative electron affinity
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NET	Next European Tokamak
NETD	noise equivalent temperature differential
NEXAFS	near-edge X-ray absorption fine structure
NEXT	near-end crosstalk
NGS	nuclear generating station
NHS	National Health Service (UK)
NIC	negative impedance convertor
NICAM	near-instantaneously companded audio multiplex
NIR	near IR
NIST	National Institute of Standards and Technology (USA)
NLC	nematic liquid crystal
NLDC	nonlinear directional coupler
NLMS	normalised least mean square(s)
NLO	next-to-leading order *or* nonlinear optical
NLP	natural language processing
NLTE	non-local thermodynamic equilibrium
NMOS	n-channel MOS
NMR	nuclear magnetic resonance
NMR-ON	NMR on oriented nuclei
NMRR	normal-mode rejection ratio
NMS	network management system
NNI	network node interface
NNNDO	neglect of non-neighbour differential overlap
NOAA	National Oceanic and Atmospheric Administration (USA)
NOFC	New Oxide Fuels Complex (BNFL)
NOR	NOT-OR (logic)
NOVA	nonoverlapping super-self-aligned
NOW	network of workstations
NP	nondeterministic polynomial
NPL	National Physical Laboratory (UK)
NPP	nuclear power plant
NQR	nuclear quadrupole resonance
NRC	Nuclear Regulatory Commission (USA)
NRD	nonradiative dielectric
NRM	natural remanent magnetisation
NRZ	non-return to zero
NRZI	NRZ inverted
NS	Navier-Stokes
NSLS	National Synchrotron Light Source
NSOM	near-field scanning optical microscopy
NSPUDT	natural single phase unidirectional transducer
NSRR	Nuclear Safety Research Reactor
NSSS	nuclear steam supply system
NTC	negative temperature coefficient
NTD	neutron transmutation doping
NTE	network termination equipment
NTL	nonthreshold logic
NTSC	National Television Standards Committee *or* National Television Systems Committee
NTT	Nippon Telegraph and Telephone
NTU	network termination unit
NURBS	non-uniform rational B-spline
NVG	night vision goggles
NVL	night vision laboratory
NVLAP	National Voluntary Laboratory Accreditation Program
NVM	nonvolatile memory
NVRAM	nonvolatile RAM

NWA	network analyser
NWPA	Nuclear Waste Policy Act (USA)
OA	office automation
OAM&P	operations, administration, maintenance and provisioning
OAM	operations, administration and maintenance
OATS	open area test site
OBDD	ordered binary decision diagram
OBIC	optical beam induced current(s)
OBIRCH	optical beam induced resistance change
OCR	optical character recognition
OCRWM	Office of Civilian Radioactive Waste Management (USA)
OCT	optical coherence tomography
ODA	Office Document Architecture
ODE	ordinary differential equation
ODF	orientation distribution function
ODMG	Object Data Management Group
ODMR	optical detection of magnetic resonance
ODP	open distributed processing
OEIC	optoelectronic integrated circuit
OEM	original equipment manufacture(r)
OER	oxygen enhancement ratio
OFDCS	optical fibre digital communication system
OFDM	orthogonal FDM
OH	ohmic heating
OHTE	Ohmically Heated Toroidal Experiment
OIM	orientation imaging microscopy
OISF	oxidation induced stacking fault
OLAP	online analysis and processing
OLCR	optical low coherence reflectometer(-try)
OLE	object linking and embedding
OLED	organic light emitting device (*or* diode *or* display)
OLTP	online transaction processing
OMCVD	organometallic CVD
OME	oxide-mediated epitaxy
OMI	optical mode interference
OMT	object modelling technique
OMVPE	organometallic vapour phase epitaxy
ONA	open network architecture
ONO	oxide-nitride-oxide
OO	object-oriented
OOP	object-oriented programming
OPA	optical parametric amplifier
OPAC	online public access catalogue
OPC	object linking for process control
OPF	optimal power flow
OPGW	optical fibre composite ground wire
OPHF	orbital polarised Hartree-Fock
OPO	optical parametric oscillator
OPW	orthogonal plane wave
OQPSK	offset quadrature phase shift keying
OR	operations research
ORB	object request broker
ORELA	Oak Ridge Electron Linear Accelerator (USA)
ORNL	Oak Ridge National Laboratory (USA)
OS	operating system
OS-EM	ordered subset expectation maximization
OSE	open system environment
OSI	Open Systems Interconnection
OSP	organic solderability preservative
OSS	operations support system
OTA	operational transconductance amplifier
OTDR	optical time domain reflectometry
OTEC	ocean thermal energy conversion
OTF	optical transfer function
OTH	over the horizon
OTS	Orbital Test Satellite
OTSG	once-through steam generator
OZL	Okubo-Zweig-Lizuha (quark model)
PAA	paraazoxyanisole
PABX	private automatic branch exchange
PAC	perturbed angular correlation *or* probably approximately correct
PACS	picture archiving and communication system *or* personal access communication system
PAE	power-added efficiency
PAFC	phosphoric acid fuel cells
PAG	photo-acid generator
PAH	polycyclic aromatic hydrocarbon(s)
PAHR	post-accident heat removal
PAL	phase alternate line *or* programmable array logic
PAM	programmable active memory *or* pulse amplitude modulation
PANDA	polarisation maintaining and absorption reducing
PANI	polyaniline
PAP	paraazoxyphenetole
PARS	private advanced radio service
PBF	power bursts facility
PBFA	Particle Beam Fusion Accelerator
PBGA	plastic ball grid array
PBH	planar buried heterostructure
PBL	planetary boundary layer
PBR	pebble bed reactor
PBT	permeable base transistor
PBW	power-by-wire
PBX	private branch exchange
PC	personal computer *or* printed circuit *or* programmable controller
PCA	principal component analysis
PCAC	partially conserved axial currents
PCB	polychlorinated biphenyl *or* printed circuit board
PCES	phase change energy storage
PCI	pellet-cladding interaction *or* Peripheral Component Interconnect
PCILO	perturbative configuration interaction using localised orbitals
PCILOCC	PCILO for crystal calculation
PCM	phase change material *or* pulse code modulation
PCMCIA	Personal Computer Memory Card International Association
PCN	personal communications network
PCR	polymerase chain reaction *or* principal component regression
PCRV	prestressed concrete reactor vessel
PCS	personal communication services (systems)
PCTE	Portable Common Tools Environment
PCV	primary containment vessel
PCX	plasma confinement experiment
PD	partial discharge
PDB	planar doped barrier
PDE	partial differential equation
PDEF	physical design exchange format

PDF	portable document format *or* probability density (*or* distribution) function
PDH	plesiochronous digital hierarchy
PDLC	polymer dispersed liquid crystal
PDP	plasma display panel
PDPA	phase Doppler particle analyser
PDT	photodynamic therapy
PDX	Poloidal Divertor Experiment
PE	phase encoded
PEC	photoelectrochemical cell
PECVD	plasma enhanced CVD
PEEK	polyaryletheretherketone *or* polyetheretherketone
PEEL	programmable electrically erasable logic
PEFC	polymer electrolyte fuel cell
PEM	photo-electromagnetic *or* privacy-enhanced mail *or* proton exchange membrane
PEP	Positron Electron Photon (collider, Stanford, USA)
PES	photoelectron spectra (-oscopy)
PET	polyethylene terephthalate *or* positron emission tomography
PETRA	Positron Electron Tandem Ringbeschleuniger Anlage
PF	poloidal field *or* power factor
PFBC	pressurised fluidised bed combustion
PFC	perfluorocarbon *or* power factor correction
PFG	pulsed field gradient
PFM	pulse frequency modulation
PFP	power factor pre-regulator
PFR	Prototype Fast Reactor
PGA	pin grid array *or* programmable gate array
PHEMT	pseudomorphic high electron mobility transistor
PHIGS	Programmer's Hierarchical Interactive Graphic System
PHS	personal handy-phone system
PHWR	pressurised heavy water reactor
PIC	particle-in-cell
PICTS	photo-induced current transient spectra (-oscopy)
PID	proportional + integral + differential (*or* derivative)
PIII	plasma immersion ion implantation
PIN	p-type intrinsic n-type
PIPECO	photoion photoelectron coincidence
PIUS	process inherent ultimately safe
PIXE	particle (*or* proton) induced X-ray emission
PL	photoluminescence
PLA	phase-locked array *or* programmable logic array
PLBR	Prototype Large Breeder Reactor
PLC	programmable logic control(ler)
PLCC	plastic leadless chip carrier
PLD	programmable logic device *or* pulsed laser deposition
PLEX	plant life extension
PLL	phase locked loop
PLT	Princeton Large Torus
PLZT	lead lanthanum zirconate titanate
PM	permanent magnet *or* phase modulation *or* pulse modulation
PMAD	power management and distribution
PMDR	phosphorescence microwave double resonance
PMF	polarisation maintaining fibre
PML	perfectly matched layer
PMMA	polymethylmethacrylate
PMOS	p-channel metal-oxide-semiconductor
PMR	private mobile radio *or* proton magnetic resonance
PMS	pre-main sequence
PMSM	permanent magnet synchronous motor
PN	planetary nebula(e) *or* pseudonoise
PNDO	partial neglect of differential overlap
PNNI	private network-network interface
PNO-CI	pair natural orbital configuration interaction
PNS	Pulsed Neutron Source
PO	physical optics
POCS	projection on to convex sets
POL	pair orthogonalised Lowdin
PON	passive optical network
POP	point of presence
POPAE	protons on protons and electrons
POPOP	phenyl-oxazolyl-phenyl-oxazolyl-phenyl
PORV	power operated relief valve
POS	point of sale
POTS	plain old telephone service
PPB	parts per billion
PPC	persistent photoconductivity
PPDP/S	Pariser-Parr-Del Bene-Pople/Segal calculations
PPI	plan position indicator
PPM	parts per million *or* pulse position modulation
PPP	Pariser-Parr-Pople
PQFP	plastic quad-flat-pack
PRA	probabilistic risk assessment
PRAM	parallel random access machine
PRDDO	partial retention of diatomic differential overlap
PREPP	Process Experimental Pilot Plant
PREVAIL	projection reduction exposure with variable-axis immersion lenses
PRF	pulse recurrence (repetition) frequency
PRIME	positive resist images by dry etching
PRMA	packet reservation multiple access
PRML	partial response maximum likelihood
PRN	packet radio networks
PROLOG	Programming in Logic (language)
PROM	Pockels readout optical modulator *or* programmable ROM
PS	proton synchrotron (CERN)
PSA	probabilistic safety assessment
PSD	power shut-down *or* power spectral density
PSDN	packet switched data network
PSG	phosphosilicate glass
PSI	phase-shifting interferometry
PSK	phase shift keying
PSNR	peak signal-to-noise ratio
PSS	packet switching service *or* power system stabiliser
PSTN	public switched telephone network
PSU	power supply unit
PTC	positive temperature coefficient
PTD	physical theory of diffraction
PTF	polymer thick film
PTFE	polytetrafluoroethylene
PTH	plated through hole
PTM	pulse time modulation

PTT	Posts, Telephones and Telegraphs
PV	photovoltaic
PVA	polyvinyl alcohol
PVC	polyvinyl chloride
PVD	physical vapour deposition
PVDF	polyvinylidene fluoride
PVER	pattern visual evoked response
PVM	Parallel Virtual Machine
PWA	partial wave analysis *or* printed wiring assembly
PWB	printed wiring board
PWBA	plane wave Born approximation
PWIA	plane wave impulse approximation
PWM	pulse width modulation
PWR	pressurised water reactor
PXI	PCI extensions for instrumentation
PZT	lead zirconate titanate
QA	quality assurance
QAM	quadrature amplitude modulation
QASK	quadrature amplitude shift keying
QBO	quasi-biennial oscillation
QC	quality control
QCD	quantum chromodynamics
QCM	quartz crystal microbalance
QCPM	quadrature continuous phase modulation
QCSE	quantum confined Stark effect
QD	quantum dot
QDMBPT	quasi-degenerate MBPT
QED	quantum electrodynamics
QFP	quad-flat-pack *or* quantum flux parametron
QFSK	quadrature frequency shift keying
QFT	quantum field theory
QGP	quark-gluon plasma
QHD	quantum hadrodynamics
QHE	quantum Hall effect
QMD	quantum molecular dynamics
QMF	quadrature mirror filter
QML	qualified manufacturers list
QORC	quadrature overlapped raised cosine
QoS	quality of service
QOSRC	quadrature overlapped squared raised cosine
QPL	qualified parts (or products) list
QPM	quark-parton model
QPO	quasi-periodic oscillation
QPR	quadrature partial response
QPRS	quadrature partial response signalling
QPSK	quaternary phase shift keying
QRC	quasi-resonant converter
QSO	quasi-stellar object (quasar)
QTAG	Quality Test Action Group
QW	quantum well
QWH	quantum well heterostructure
QWIP	quantum well IR photodetector
QWITT	quantum well injection transit time
R&D	research and development
RACE	Research and Development in Advanced Communications Technologies in Europe
RAD	ribbon-against-drop
RAID	redundant arrays of inexpensive disks
RAM	radar absorbing material *or* random access memory *or* reliability, availability and maintainability
RAMDAC	random access memory digital/analogue convertor
RAN	radio-area network
RARE	rapid acquisition with relaxation enhancement
RBE	relative biological effectiveness
RBF	radial basis function
RBMK	light water cooled, graphite moderated reactor
RBOC	Regional Bell Operating Company
RBS	Rutherford backscattering
RBSOA	reverse biased safe operating area
RC	resistance-capacitance
RCCB	residual current circuit breaker
RCD	residual current device
RCIC	reactor core isolation cooling
RCS	radar cross-section *or* rapid cycling synchrotron *or* reactor coolant systems
RCTL	resistor-capacitor-transistor logic
RDBMS	relational DBMS
RDS	Radio Data System
RDSS	radio determination satellite service
REA	rod ejection accident
REE	rare earth element(s)
REELS	reflection electron energy loss spectra (-oscopy)
RELP	residual excited linear prediction
REM	reflection electron microscopy *or* rare earth metal(s) *or* rapid eye movement
REMPI	resonance enhanced multiphoton ionisation
RESURF	reduced surface field
RF	radiofrequency
RFI	RF interference
RFIC	RF integrated circuit
RFP	reversed field pinch *or* request for proposals
RFPR	reversed field pinch reactor
RFX	reversed field (pinch) experiment
RG	renormalisation group
RGA	residual gas analyser
RGB	red, green, blue
RGM	resonating group method
RHEED	reflection high-energy electron diffraction
RHET	resonant hot electron transistor
RHF	restricted Hartree-Fock
RHIC	relativistic heavy ion collider
RIA	reactivity initiated accident
RIB	radioactive ion beam
RIBE	reactive ion beam etching
RICH	ring imaging Cherenkov detector
RIE	reactive ion etching
RINDO	Rydberg incomplete NDO
RISC	reduced instruction set computer (-ing)
RKKY	Rudermann-Kittel-Kasuya-Yosida
RLC	resistance-inductance-capacitance
RLL	run-length limited
RLS	recursive least squares
RLSA	radial line slot antenna
RMS	root-mean-square
RNA	ribonucleic acid
RNS	residue number system
ROC	receiver operating characteristic
ROM	read-only memory
ROV	remotely operated vehicle
ROXNOX	reoxidised nitrided oxide
RPA	random phase approximation
RPAE	RPA with exchange

RPC	resistive plate chamber/counter *or* remote procedure call
RPM	relaxation potential model *or* revolutions per minute
RPV	reactor pressure vessel *or* remote piloted vehicle
RS	Reed-Solomon
RSA	reverse saturable absorber *or* Rivest-Shamir-Adleman
RSCE	reverse short channel effect
RSF	response surface function
RSFQ	rapid single flux quantum
RT	room temperature
RTA	rapid thermal annealing
RTCVD	rapid thermal CVD
RTD	resonant tunnelling diode
RTG	radioisotope thermoelectric generators
RTI	road traffic informatics
RTL	resistor-transistor logic *or* register transfer level
RTN	rapid thermal nitridation
RTO	rapid thermal oxidation
RTP	rapid thermal processing
RTT	resonant tunnelling transistor
RTTY	radio teletypewriter *or* remote teletype terminal
RTV	room temperature vulcanizing
RVB	resonating valence bond
RWG	Rao-Wilton-Glisson
S/H	sample and hold
S/N	signal-to-noise
SAA	Systems Application Architecture
SAED	selected area electron diffraction
SAG	self-aligned gate
SAINT	self-aligned implantation for N^+-layer technology
SAIR	synthetic aperture interferometric radar
SAM	scanning acoustic (*or* Auger) microscopy *or* self-assembled monolayer *or* serial access memory
SAMO	simulated ab initio molecular orbitals
SAMOS	stacked gate avalanche injection metal-oxide-semiconductor
SAMPLE	simulation and modelling of profile in lithography and etching
SAN	small-area network
SANS	small-angle neutron scattering
SAR	synthetic aperture radar *or* specific absorption rate
SARSAT	search and rescue satellite aided tracking
SAW	surface acoustic waves *or* self-avoiding walk
SAXS	small-angle X-ray scattering
SBE	super birefringence effect
SBH	strip buried heterostructure
SBLOCA	small-break LOCA
SBS	stimulated Brillouin scattering
SC	switched capacitor
SCADA	supervisory control and data acquisition
SCALPEL	scattering with angular limitation projection electron beam lithography
SCARA	selective compliance assembly robot arm
SCC	stress corrosion cracking
SCDMA	synchronous code division multiple access
SCE	service creation environment
SCF	self-consistent field
SCFL	source-coupled FET logic
SCH	separate confinement heterostructure
SCI	scalable coherent interface
SCID	severe combined immunodeficiency
SCL	space charge limited
SCM	scanning capacitance microscopy *or* subcarrier multiplex(ing)
SCP	service control point
SCPC	single channel per carrier
SCPI	small-computer programmable instrument *or* standard commands for programmable instruments
SCR	silicon-controlled rectifier
SCSI	Small Computer System Interface
SCTF	Slab Core Test Facility
SDB	silicon direct bonding
SDF	synthetic discriminant function
SDFL	Schottky-diode FET logic
SdH	Shubnikov-de Haas
SDH	synchronous digital hierarchy
SDI	selective dissemination of information *or* Strategic Defense Initiative (USA)
SDK	software development kit
SDL	Specification and Description Language
SDLC	synchronous data link control
SDM	space division multiplexing
SDMA	space division multiple access
SDW	spin density wave
SEAM	scanning electron acoustic microscopy
SECAM	sequential colour and memory
SED	stochastic electrodynamics
SEE	single event effect(s)
SEED	self-electrooptic effect device
SEG	selective epitaxial growth
SEI	Software Engineering Institute
SEIG	self-excited induction generator
SEL	surface emitting laser
SEM	scanning electron microscopy
SEMI	Semiconductor Equipment and Material International Association
SEP	somatosensory evoked potential
SERC	Science and Engineering Research Council
SERS	surface enhanced Raman scattering
SETI	search for extraterrestrial intelligence
SEU	single event upset
SEXAFS	surface extended X-ray absorption fine structure
SFE	solar-flare effect
SFG	sum frequency generation
SFL	substrate-fed logic
SFM	scanning force microscopy
SFUR	self-filtering unstable resonator
SGEMP	system generated electromagnetic pulse
SGHWR	steam generating heavy water reactor
SGML	Standard Generalized Markup Language
SGMP	sol-gel microsphere pelletisation
SHF	super-high-frequency
SHG	second harmonic generation
SHOOT	superfluid helium on-orbit transfer
SHR	self-healing rings *or* South Hall Ring (MIT-Bates)
SHS	self-propagating high-temperature synthesis
SHV	super-high votage

SI	semi-insulating *or* Système International
SICOS	sidewall base contact structure
SID	Society for Information Display
SIF	stress intensity factor
SIL	single-in-line *or* solid immersion lens
SIMD	single instruction, multiple data
SIMOS	stacked-gate injection MOS
SIMOX	separation by implantation of oxygen
SIMS	secondary ion mass spectra (-oscopy)
SIN	Swiss Institute of Nuclear Research
SINDO	scaled incomplete NDO
SINR	signal-to-interference-plus-noise ratio
SIPOS	semi-insulating polycrystalline silicon
SIR	safe integral reactor *or* signal-to-interference ratio
SIS	semiconductor-insulator-semiconductor *or* superconductor-insulator-superconductor
SISAM	spectrometer with interference-selective amplitude modulation
SISFET	semiconductor-insulator-semiconductor FET
SISO	single input, single output
SIT	static induction transistor
SLA	semiconductor laser amplifier
SLAC	Stanford Linear Accelerator
SLALOM	semiconductor laser amplifier in a loop mirror
SLAM	scanning laser acoustic microscopy
SLC	smectic liquid crystal *or* Stanford Linear Collider *or* subscriber loop carrier
SLD	strict logical determinacy
SLIA	Spiral Line Induction Accelerator
SLIC	subscriber line interface circuit
SLM	spatial light modulator
SLS	strained-layer superlattice
SLSF	Sodium Loop Safety Facility
SMA	surface mount(ed) assembly *or* shape memory alloy
SMATV	satellite master antenna television
SMC	Small Magellanic Cloud *or* surface mount(ed) component
SMD	surface mount(ed) device
SMDS	switched multimegabit data service
SME	shape memory effect *or* small and medium-sized enterprises
SMES	superconductive magnetic energy storage
SMF	single mode fibre
SMIF	standard mechanical interface
SMOBC	solder mask over bare copper
SMOKE	surface magneto-optic(al) Kerr effect
SMPS	switched mode power supply
SMQORC	staggered modified quadrature overlapped raised cosine
SMSR	side mode suppression ratio
SMT	surface mount(ed) technology
SN	supernova(e)
SNA	Systems Network Architecture
SNM	special nuclear material
SNMP	simple network management protocol
SNOM	scanning near-field optical microscopy
SNR	signal-to-noise ratio *or* supernova remnant
SNS	spallation neutron source *or* superconducting-normal-superconducting
SOA	safe operating area *or* semiconductor optical amplifier
SoC	system on chip
SOFC	solid oxide fuel cells
SOG	spin on glass *or* strongly orthogonal geminal *or* sea of gates
SOHO	small office/home office
SOI	silicon on insulator *or* signal of interest
SOIC	small outline integrated circuit
SOL	scrape-off layers
SONET	synchronous optical network
SOP	small outline package *or* state of polarisation
SOPPA	second-order polarisation propagator approximation
SOR	successive over-relaxation *or* synchrotron orbital radiation
SOS	silicon on sapphire
SOT	small outline transistor
SPA	separated pair approximation
SPARC	scalable processor architecture *or* Standards Planning and Requirements Committee (of ANSI)
SPC	statistical process control *or* stored program control
SPCP	single parity check product (code)
SPDT	single-point diamond turning *or* single pole, double throw
SPE	solid phase epitaxy
SPEAR	Stanford Positron Electron Asymmetric Ring
SPECT	single photon emission computerised tomography
SPICE	Simulation Program with Integrated Circuit Emphasis
SPIHT	set partitioning in hierarchical trees
SPLEED	spin polarised low energy electron diffraction
SPM	scanning probe microscopy
SPN	stochastic Petri net
SPRITE	signal processing in the element
SPS	Super Proton Synchrotron (CERN)
SPST	single pole single throw
SPUDT	single-phase unidirectional transducer
SPV	surface photovoltage
SQAM	superposed QAM
SQC	statistical quality control
SQL	Structured Query Language
SQPR	staggered quadrature partial response
SQPSK	staggered quadrature PSK
SQS	self-quenching streamer chamber
SQUID	superconducting quantum interference device
SQW	single quantum well
SR	synchrotron radiation
SRAM	static RAM
SREMP	source region electromagnetic pulse
SRM	switched reluctance motors
SRMCASE	symmetry-restricted-multiconfiguration annihilation of single excitations
SRO	short-range order
SRS	stimulated Raman scattering
SRV	safety release valve
SS	spread spectrum
SS-TDMA	satellite-switched TDMA
SS7	Signalling System No.7

SSB	single sideband
SSBW	surface skimming bulk wave
SSC	sudden storm commencement *or* Superconducting Super Collider
SSCR	spectrum shift controlled reactor
SSFL	Schottky-barrier coupled Schottky-barrier gate FET logic
SSFLC	surface stabilised ferroelectric liquid crystal
SSI	small-scale integration
SSMA	spread spectrum multiple access
SSNTD	solid-state nuclear track detector
SSR	subsynchronous resonance
SST	sea surface temperature *or* supersonic transport *or* super self-aligned technology
SSV	structured singular value
STAP	space-time adaptive processing
STATCOM	static compensator
STD	salinity-temperature-depth *or* subscriber trunk dialling
STEC	solar thermal energy conversion
STEM	scanning transmission electron microscopy
STEP	Standard for Exchange of Product Data
STI	scientific and technical information *or* shallow trench isolation
STL	Schottky transistor logic *or* Standard Template Library
STM	scanning tunnelling microscopy *or* synchronous transfer mode
STN	super twisted nematic
STO	Slater-type orbitals
STOL	short take-off and landing
STP	Slater-transfer Preuss
STS	scanning tunnelling spectra (-oscopy)
SURMAC	surface magnetic confinement
SUSY GUT	supersymmetric grand unified theory
SVC	static VAr compensator
SVD	singular value decomposition
SVM	support vector machine
SVQ	split vector quantisation
SW	short-wave
SWAMI	sidewall masked isolation
SWAP	synchronous wireless access protocol
SWEAT	standard wafer-level electromigration accelerated test
SWEPP	Stored Waste Examination Pilot Plant
SWNT	single wall nanotube
SWR	sodium water reactor *or* standing wave ratio
SXAPS	soft X-ray appearance potential spectra (-oscopy)
SXLS	Superconducting X-ray Lithography Source
T/H	track and hold
T/R	transmit/receive
TA	transverse acoustic
TAB	tape automated bonding
TACS	Total Access Communications System
TASI	time assignment speech interpolation
TAT	transatlantic telephone cable
TBBA	terephthal-bis-butylaniline
TBDF	transborder data flow
TCAD	technology CAD
TCAS	traffic alert and collision avoidance system
TCE	temperature (*or* thermal) coefficient of expansion
TCM	trellis-coded modulation
TCNE	tetracyanoethylene
TCNQ	tetracyanoquinodimethane
TCP/IP	Transport Control Protocol/Internet Protocol
TCR	temperature coefficient of resistance *or* thyristor-controlled reactor
TCSC	thyristor-controlled series compensation (capacitor)
TCXO	temperature-compensated crystal oscillator
TDD	ternary decision diagram *or* time division duplex
TDDB	time-dependent dielectric breakdown
TDF	Technology Demonstration Facility *or* transborder data flow
TDHF	time-dependent Hartree-Fock
TDI	time delay and integration
TDM	time division multiplex(ing)
TDMA	time division multiple access
TDMF	time-dependent mean field theory
TDPAC	time differential PAC
TDR	time domain reflectometry
TDRSS	tracking and data relay satellite system
TDS	thermal desorption spectra (-oscopy)
TE	transverse electric
TEA	transversely excited atmosphere
TED	transferred electron device *or* transient enhanced diffusion *or* transmission electron diffraction
TEGFET	two-dimensional electron gas FET
TEM	transmission electron microscopy *or* transverse electromagnetic
TEO	transferred electron oscillator
TEOS	tetraethylorthosilicate
TETRA	trans-European trunked radio
TEXT	Texas Experimental Tokamak
TF	toroidal field
TFCX	Toroidal Fusion Core Experiment
TFEL	thin film electroluminescent
TFSOI	thin film silicon on insulator
TFT	thin film transistor
TFTR	Tokamak Fusion Test Reactor
TGA	thermogravimetric analysis
TGFB	triglycine fluoroberyllate
TGS	triglycine sulphate
TGSe	triglycine selenate
THA	track-and-hold amplifier
THD	total harmonic distortion
THF	tremendously high frequency
THG	third harmonic generation
THORP	Thermal Oxide Reprocessing Plant
THORS	Thermal Hydraulic Out-of-Reactor Safety Facility
THTF	Thermal Hydraulic Test Facility
TIA	Telecommunications Industry Association
TID	travelling ionospheric disturbance
TIG	tungsten inert gas
TIL	two-interdigitation level
TINA	Telecommunications Information Network(ing) Architecture
TISSS	Tester-Independent Software Support System
TJS	transverse junction stripe

TLD	thermoluminescent dosimeter (-metry)
TLM	transmission line matrix
TM	transverse magnetic
TMAH	tetramethyl ammonium hydroxide
TMC	test module coil
TMHR	tandem mirror hybrid reactor
TMMC	tetramethylammonium manganese chloride
TMN	telecommunications management network
TMR	tandem mirror reactor *or* tunnel magnetoresistance
TMS	truth maintenance system
TMTSF	tetramethyltetraselenafulvalene (-inium)
TMTTF	tetramethyltetrathiafulvalene (-inium)
TMX-U	Tandem Mirror Experiment-Upgrade
TNS	The Next Step
TO	transverse optical
TOF	time-of-flight
TOFMS	time-of-flight mass spectra
TOI	thermal oxide isolation
TOP	Technical Office Protocol *or* transient overpower accident
TPAD	time differential perturbed angular distribution
TPC	time projection chamber
TPD	temperature programmed desorption
TPP	thermal power plant
TPS	test program(me) set
TPTF	Two Phase Flow Test Facility
TPV	thermophotovoltaic
TQFP	thin quad flat pack
TQM	total quality management
TR3	time-resolved resonant Raman
TRAPATT	trapped plasma avalanche triggered transit
TRD	transition radiation detector
TREAT	Transient Reactor Test Facility
TRM	thermoremanent magnetisation
TRRR	time-resolved resonant Raman (spectra (-oscopy))
TRU	transuranic (waste)
TRV	transient recovery voltage
TSA	tapered slot antenna
TSC	thermally stimulated currents *or* totally self checking
TSD	thermally stimulated desorption
TSEE	thermally stimulated exo-electron emission
TSeF	tetraselenafulvalene (-inium)
TSeT	tetraselenatetracene
TSIC	thermally stimulated ionic currents
TSMA/PCD	tone sense multiple access/partial collision detection
TSOP	thin small-outline package
TSP	travelling salesman problem
TSR	terminate and stay resident
TSTA	Tritium Systems Test Facility
TTC	telemetry tracking and command
TTF	tetrathiafulvalene (-inium)
TTL	transistor-transistor logic
TTMP	transit time magnetic pumping
TTT	temperature-time-transformation *or* tetrathiatetracene
TTY	teletype terminal
TUCA	transient undercooling accident
TUCOP	transient undercooled overpower accident
TUNNETT	tunnel transit time
TV	television
TVRO	TV receive only
TW	travelling wave
TWA	TW amplifier
TWOA	TW optical amplifier
TWT	TW tube
TWTA	TWT amplifier
TXRF	total reflection X-ray fluorescence
UART	universal asynchronous receiver transmitter
UBR	unspecified bit rate
UCHF	uncoupled Hartree-Fock
UCN	ultra-cold neutrons
UDP	user datagram protocol
UGS	unattended ground sensor
UHF	ultra-high frequency *or* unrestricted Hartree-Fock
UHPS	underground hydroelectric pumped storage
UHV	ultra-high voltage
UIMS	user interface management system
UJT	unijunction transistor
UK	United Kingdom
UKAEA	United Kingdom Atomic Energy Authority
ULA	uncommitted logic array
ULF	ultra-low frequency
ULSI	ultra-large scale integration
UMD	unitised microwave devices
UML	Unified Modeling Language
UMTS	universal mobile telecommunication system
UNI	user-network interface
UPFC	unified power flow controller
UPS	UV photoelectron spectra (-oscopy) *or* uninterruptible power supply
UPT	universal personal telecommunication
UPW	ultrapure water
URL	uniform resource locator
US	ultrasonic *or* United States
USART	universal synchronous/asynchronous receiver transmitter
USB	universal serial bus
USRT	universal synchronous receiver/transmitter
UTD	uniform theory of diffraction
UTP	unshielded twisted pair
UUT	unit under test
UV	ultraviolet
UWB	ultra-wideband
V/F	voltage-to-frequency
VACSY	variable angle correlation spectroscopy
VAD	vapour-phase axial deposition
VAN	value-added network
VANS	VAN services
VAWT	vertical axis wind turbine
VB	valence bond
VBL	vertical Bloch line
VBR	variable bit rate
VC	virtual circuit *or* Vapnik-Chervonenkis
VCCS	voltage-controlled current source
VCO	voltage-controlled oscillator
VCR	video cassette recorder
VCSEL	vertical cavity surface emitting laser
VCVS	voltage-controlled voltage source
VCXO	voltage-controlled crystal oscillator
VDM	vector dominance model *or* Vienna Development Methodology

VDMOS	vertical double diffused MOS
VDSL	very high-speed digital subscriber line
VDT	visual display terminal
VDU	visual display unit
VDW	van der Waals
VER	visual evoked response
VFD	vacuum fluorescent display *or* variable-frequency drive
VFO	variable-frequency oscillator
VGA	Video Graphics Array
VGF	vertical gradient freeze
VHDL	VHSIC HDL
VHF	very high frequency
VHPIC	very high-performance integrated circuit
VHSIC	very high-speed integrated circuit
VHSOL	very high-speed optical loop
VHV	very high voltage
VI&P	visual, intelligent and personal (communications)
VIPER	verified processor for enhanced reliability
VISA	Virtual Instrument Software Architecture
VJFET	vertical junction FET
VLBI	very long base line interferometry
VLBR	very low bit rate
VLC	variable length code
VLF	very low frequency
VLIW	very long instruction word
VLSI	very large scale integration
VM	virtual machine
VMEbus	versatile modular E-bus
VMOS	vertical channel MOS
VMS	Virtual Management System
VNA	vector network analyser
VOC	volatile organic compound
VoD	video on demand
VOR	VHF omnidirectional range
VP	virtual path
VPE	vapour phase epitaxy
VPN	virtual private network
VQ	vector quantisation
VR	virtual reality
VRAM	video RAM
VRC	visual record computer
VRML	Virtual Reality Modeling Language
VS	virtual storage
VSAT	very small aperture terminals
VSB	vestigial sideband
VSELP	vector sum excited linear prediction
VSEPR	valence shell electron pair repulsion
VSI	voltage source invertor
VSOP	very small-outline package
VSP	vertical seismic profiling
VSS	variable structure systems
VSWR	voltage standing wave ratio
VTOL	vertical take-off and landing
VTR	video tape recorder *or* voltage transformation ratio
VUV	vacuum UV
VVVF	variable voltage, variable frequency
VXI	VME extensions for instrumentation
W-CDMA	wideband CDMA
WAAS	wide-area augmentation system
WAN	wide-area network
WARC	World Administrative Radio Conference
WASP	WSI associative string processor
WATM	wireless asynchronous transfer mode
WATS	wide-area telecommunications service
WAXS	wide-angle X-ray scattering
WDF	wave digital filter
WDM	wavelength division multiplex(ing)
WDMA	wavelength division multiple access
WECS	wind energy conversion system
WHT	Walsh-Hadamard transform
WIMP	weakly interacting massive particle *or* windows, icons, mice, pull-down menus
WIP	work in progress
WIPO	World Intellectual Property Organisation
WIPP	Waste Isolation Pilot Plant
WKB	Wentzel-Kramers-Brillouin
WLAN	wireless LAN
WLL	wireless local loop
WLR	wafer-level reliability
WORM	write once, read many times
WP	word processing
WR	Wolf-Rayet
WSI	wafer scale integration
WTA	winner take(s) all
WWER	water-moderated water-cooled reactor
WWW	World Wide Web
WYSIWYG	what you see is what you get
WZW	Wess-Zumino-Witten
XANES	X-ray absorption near-edge structure
XCT	X-ray computerised tomography
XLPE	cross-linked polyethylene
XLS	X-ray Lithography Source
XOR	exclusive OR (logic)
XPD	cross-polarisation discrimination
XPS	X-ray photoelectron spectra
XRD	X-ray diffraction
XTEM	cross-sectional transmission electron microscopy
XUV	X-ray-UV
YAG	yttrium aluminium garnet
YIG	yttrium iron garnet
YM	Yang-Mills
YSO	young stellar object(s)
YSZ	yttria-stabilised zirconia
YTO	YIG tuned oscillator
ZAMS	zero-age main sequence
ZBLA	zirconium barium lanthanum aluminium fluoride
ZBLAN	zirconium barium lanthanum aluminium sodium fluoride
ZBLANP	zirconium barium lanthanum aluminium sodium lead fluoride
ZCS	zero-current switching
ZEKE	zero kinetic energy
ZGS	zero gradient synchrotron
ZIF	zero insertion force
ZMR	zone melting recrystallisation
ZPPR	zero-power plutonium reactor
ZRC	zero-field cooling(-ed)
ZTP	Z toroidal pinch
ZVS	zero-voltage switching
ZVT	zero-voltage transition

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MCA *see system buses*
MCD *see magnetic circular dichroism*
MCFC *see molten carbonate fuel cells*
MCG *see magnetocardiography*
MCM *see multichip modules*
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MFIE *see magnetic field integral equations*
MFM *see magnetic force microscopy*
MFSK *see frequency shift keying*
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MPU *see microprocessor chips*
MQW lasers *see quantum well lasers*
MRI *see magnetic resonance imaging*
MRI (biomedical) *see biomedical MRI*
MRP *see manufacturing resources planning*
MRP II *see manufacturing resources planning*
MSE *see mean square error methods*
MSK *see minimum shift keying*
MTF (optical) *see optical transfer function*
μ-analysis *see control system analysis; singular value decomposition*
μ-synthesis *see control system synthesis; singular value decomposition*
mud *see sediments*
muffin-tin potential *see linear muffin-tin orbital method*
mufflers *see silencers*
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ODENDOR *see optical double resonance*

odometers *see distance measurement*

OEIC *see integrated optoelectronics*

OEM *see DP industry*

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PCB layout *see printed circuit layout*

PCB manufacture *see printed circuit manufacture*

PCB testing *see printed circuit testing*

PCM *see pulse code modulation*

PCM (computing industry) *see DP industry*

PCMCIA cards *see memory cards*

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RS codes *see Reed-Solomon codes*

RTA *see rapid thermal annealing*

RTD *see resonant tunnelling diodes*

RTG *see radioisotope thermoelectric generators*

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SDH communication *see synchronous digital hierarchy*

SDHT *see high electron mobility transistors*

SDI *see information dissemination*

SDI (weapon systems) *see military systems; missiles; weapons*

SDL *see specification languages*

SDM *see space division multiplexing*

SDMA *see space division multiple access*

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semiconductor glasses *see amorphous semiconductors; chalcogenide glasses*

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SRM drives *see reluctance motor drives*
SS-TDMA *see time division multiple access*
SSNTD *see solid-state nuclear track detectors*
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